

# Installer's Guide

## Control Board Relocation Kit

### Models:

TEM6, A4AH5V, A4AH6V, 5TEM4, and A5AHC air handlers installed in the horizontal right orientation

### SAFETY WARNING

Only qualified personnel should install and service the equipment. The installation, starting up, and servicing of heating, ventilating, and air-conditioning equipment can be hazardous and requires specific knowledge and training. Improperly installed, adjusted or altered equipment by an unqualified person could result in death or serious injury. When working on the equipment, observe all precautions in the literature and on the tags, stickers, and labels that are attached to the equipment.

# Introduction

Read this manual thoroughly before operating or servicing this unit.

## Warnings, Cautions, and Notices

Safety advisories appear throughout this manual as required. Your personal safety and the proper operation of this machine depend upon the strict observance of these precautions.

The three types of advisories are defined as follows:



### WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



### CAUTION

Indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury. It could also be used to alert against unsafe practices.

### NOTICE

Indicates a situation that could result in equipment or property-damage only accidents.

## Important Environmental Concerns

Scientific research has shown that certain man-made chemicals can affect the earth's naturally occurring stratospheric ozone layer when released to the atmosphere. In particular, several of the identified chemicals that may affect the ozone layer are refrigerants that contain Chlorine, Fluorine and Carbon (CFCs) and those containing Hydrogen, Chlorine, Fluorine and Carbon (HCFCs). Not all refrigerants containing these compounds have the same potential impact to the environment. Trane advocates the responsible handling of all refrigerants.

## Important Responsible Refrigerant Practices

Trane believes that responsible refrigerant practices are important to the environment, our customers, and the air conditioning industry. All technicians who handle refrigerants must be certified according to local rules. For the USA, the Federal Clean Air Act (Section 608) sets forth the requirements for handling, reclaiming, recovering and recycling of certain refrigerants and the equipment that is used in these service procedures. In addition, some states or municipalities may have additional requirements that must also be adhered to for responsible management of refrigerants. Know the applicable laws and follow them.

### ⚠ WARNING

#### Proper Field Wiring and Grounding Required!

Failure to follow code could result in death or serious injury.

All field wiring **MUST** be performed by qualified personnel. Improperly installed and grounded field wiring poses **FIRE** and **ELECTROCUTION** hazards. To avoid these hazards, you **MUST** follow requirements for field wiring installation and grounding as described in NEC and your local/state/national electrical codes.

### ⚠ WARNING

#### Personal Protective Equipment (PPE) Required!

Failure to wear proper PPE for the job being undertaken could result in death or serious injury.

Technicians, in order to protect themselves from potential electrical, mechanical, and chemical hazards, **MUST** follow precautions in this manual and on the tags, stickers, and labels, as well as the instructions below:

- Before installing/servicing this unit, technicians **MUST** put on all PPE required for the work being undertaken (Examples; cut resistant gloves/sleeves, butyl gloves, safety glasses, hard hat/bump cap, fall protection, electrical PPE and arc flash clothing). **ALWAYS** refer to appropriate Safety Data Sheets (SDS) and OSHA guidelines for proper PPE.
- When working with or around hazardous chemicals, **ALWAYS** refer to the appropriate SDS and OSHA/GHS (Global Harmonized System of Classification and Labelling of Chemicals) guidelines for information on allowable personal exposure levels, proper respiratory protection and handling instructions.
- If there is a risk of energized electrical contact, arc, or flash, technicians **MUST** put on all PPE in accordance with OSHA, NFPA 70E, or other country-specific requirements for arc flash protection, **PRIOR** to servicing the unit. **NEVER** PERFORM ANY SWITCHING, DISCONNECTING, OR VOLTAGE TESTING WITHOUT PROPER ELECTRICAL PPE AND ARC FLASH CLOTHING. ENSURE ELECTRICAL METERS AND EQUIPMENT ARE PROPERLY RATED FOR INTENDED VOLTAGE.

**⚠ WARNING****Follow EHS Policies!**

Failure to follow instructions below could result in death or serious injury.

- All Trane personnel must follow the company's Environmental, Health and Safety (EHS) policies when performing work such as hot work, electrical, fall protection, lockout/tagout, refrigerant handling, etc. Where local regulations are more stringent than these policies, those regulations supersede these policies.
- Non-Trane personnel should always follow local regulations.

**⚠ WARNING****Cancer and Reproductive Harm!**

This product can expose you to chemicals including lead and bisphenol A (BPA), which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

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# General Information

This kit is designed for TEM, 5TEM, A4AH, and A5AH family air handlers installed in the horizontal right orientation which have experienced a control board failure related to accumulation of condensate. The procedures described in this document reorients the control board to prevent future failures.

There are two separate procedures.

- Reorientation of the mitigation control board in affected 5TEM4 and A5AHC models.
- Reorientation of the integrally controlled motor (ICM) control board in affected TEM6, A4AH5V, and A4AH6V models.

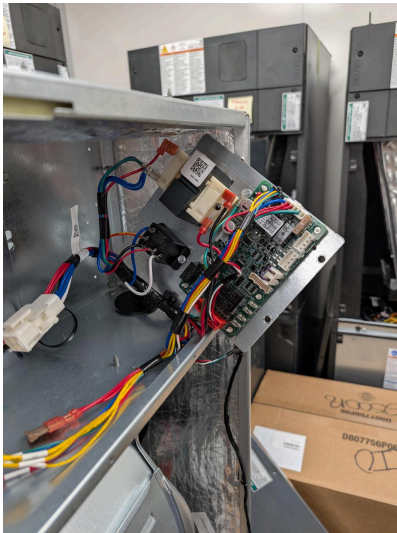
# Installation

## Reorient Mitigation Control Board (5TEM4, A5AHC)

### Remove Mitigation Control Board

1. Turn off high voltage power to the unit.
2. Remove the blower panel from the unit. Retain all screws to reinstall panels in a later step.
3. Remove the two screws that secure the control plate assembly to the air handler cabinet and set aside. Gently pull control plate assembly out of unit. See [Figure 1, p. 6](#).

**Figure 1. Control plate removal**



4. Unplug all wiring harness connections from the mitigation control board.
5. Use pliers or a similar tool to squeeze and disengage the nylon standoffs of the mitigation board from the control plate's rear side.
6. Remove mitigation board and standoffs. See [Figure 2, p. 6](#).

**Figure 2. Mitigation control board standoff removal**



### Install Mitigation Control Board Relocation Bracket

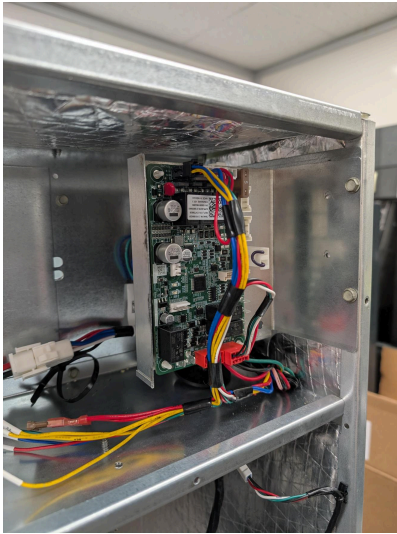
1. Put the control plate assembly back in place in the cabinet.
2. Align the relocation bracket to the control plate. See [Figure 3, p. 6](#).

**Figure 3. Relocation bracket alignment**



3. Using two screws from the previous steps, reinstall the control plate assembly and install the bracket.
4. Install the mitigation control board on the new bracket by pressing the nylon standoffs into the matching hole pattern.
5. Pull the wiring harness underneath the bracket and reconnect it to the mitigation control board. See [Figure 4, p. 7](#).

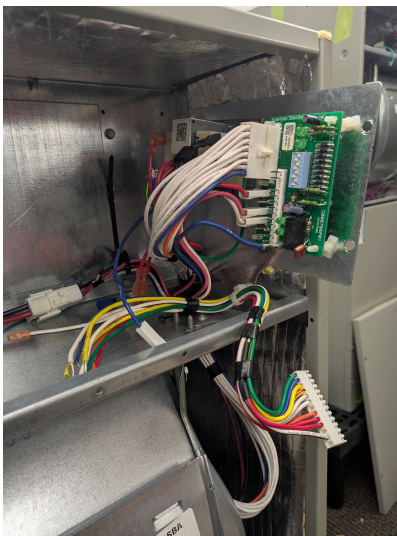
**Figure 4. Mitigation control board and wiring harness installation**



## Reorient ICM Control Board (TEM6, A4AH5V, A4AH6V)

1. Disconnect the low voltage control wiring plug from the airflow control board.
2. Disconnect the blue wire with an insulated terminal from the ICM control board that connects to the transformer (common).
3. Remove the two screws that secure the control plate assembly to the air handler cabinet and set them aside. Gently pull the control plate assembly out of the unit. See [Figure 5, p. 7](#).

**Figure 5. Remove current board position from cabinet wrapper flange**

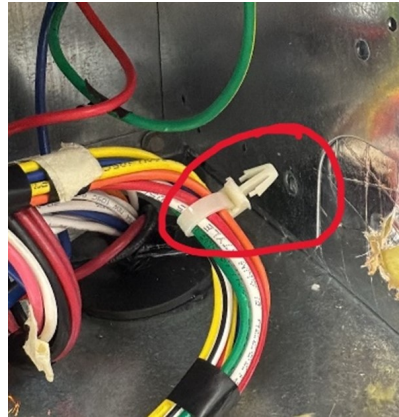


4. Squeeze and disengage the nylon standoffs of the ICM control board (CNT03600) from the control plate's rear

side using pliers or a similar tool. Remove the airflow control board and standoffs. See [Figure 2, p. 6](#).

5. Squeeze and disengage the nylon zip tie anchor from the plate for the low voltage control wiring using pliers or a similar tool. See [Figure 6, p. 7](#).

**Figure 6. Remove Nylon standoffs from rear control plate assembly**



6. Remove electrical tape from the wiring harness as necessary to allow for better wire routing for the new board.

**Note:** DO NOT cut electrical wires.

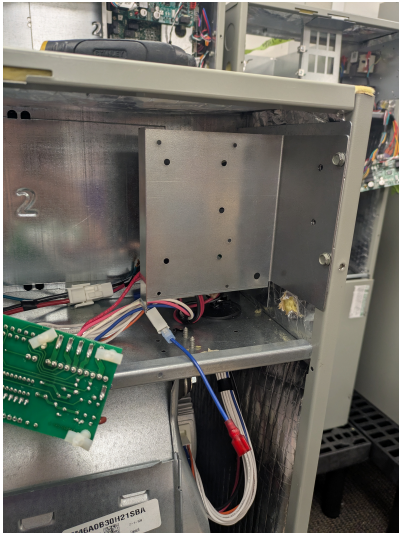
7. Connect the common wire extension (4 - inch provided) male end to the blue wire female connector that is coming from the transformer/common. See [Figure 7, p. 7](#).

**Figure 7. Common wire extension; from left: transformer blue wire (insulated terminal), to right: airflow control board (B)**



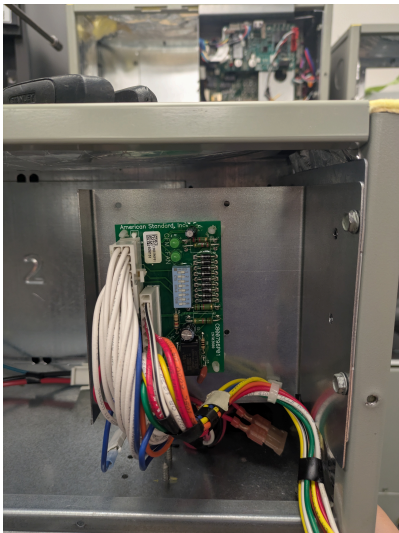
8. Reinstall the control plate and new bracket to the wrapper flange using the two screws from [Step 3](#). See [Figure 8, p. 8](#).

**Figure 8. Install bracket to cabinet**



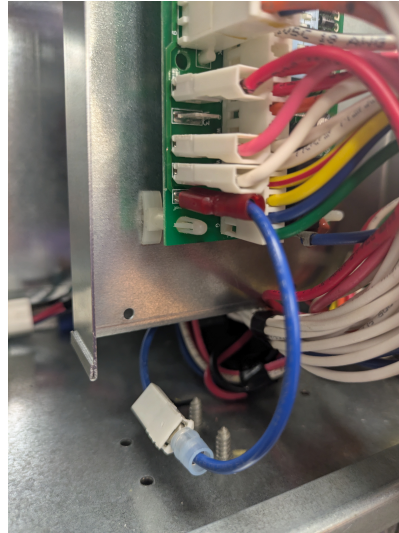
9. Mount the ICM control board and standoffs (CNT03600) onto the bracket.
10. Route the wiring harness underneath the bracket. See [Figure 9, p. 8](#).

**Figure 9. Install IFC board, wiring, and nylon standoffs to the bracket**



11. Connect the 4-inch blue wire extension to the ICM control board (B) terminal location. See [Figure 10, p. 8](#).

**Figure 10. Connect blue wire, common extension to ICM**



12. Install the zip tie anchor and wiring in the bottom right of the new control board bracket.
13. Reconnect the low voltage wiring to the control board.

## Installation - Final Steps

1. Reinstall blower panel.
2. Restore high voltage power.







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